

REMARKS

This application has been reviewed in light of the Office Action dated March 25, 2004. Claims 1-12 are pending in this application. Claim 1, which is in independent form, has been amended to define more clearly what Applicant regards as his invention. Favorable reconsideration is requested.

The Office Action rejected Claims 1-12 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,698,844 (Shinohara et al.). Applicant respectfully traverses this rejection.

Applicant submits that amended independent Claim 1, together with the remaining claims dependent thereon, are patentably distinct from Shinohara et al. at least for the following reasons.

The aspect of the present invention set forth in Claim 1 is a photoelectric converting apparatus that comprises a sensor unit and a memory unit. The sensor unit includes a plurality of pixels, with each pixel having at least a photoelectric converter and a first amplifier for amplifying a signal derived from the photoelectric converter to output the amplified signal. The memory unit includes a plurality of memories, each memory having at least a storage element for storing therein the signal derived from the sensor unit and a second amplifier for amplifying a signal derived from the storage element to output an amplified signal. The first amplifier and the second amplifier are arranged to have different gains, respectively, so that the sensor unit and the memory unit output respective signals with the same gain.

Among other important features of Claim 1 is that in a photoelectric conversion apparatus having the features recited in Claim 1, the photoelectric conversion

apparatus includes a sensor unit and a memory unit. The first amplifier included in the sensor unit and the second amplifier included in the memory unit are arranged to have different gains, respectively, so that the sensor unit and the memory unit output respective signals with the same gain. Support in the specification for these features can be found at least from page 3, line 25, to page 4, line 16; at page 8, lines 20-23, and at page 9, lines 17-23. With this feature, accurate noise reduction can be attained during signal read-out operation.

Shinohara et al. relates to a solid-state image sensing device and method of controlling the solid-state image sensing device. The Office Action states at page 3 that Shinohara et al. “does not teach that the gains for the memory cell and the sensor cell can have different gains.” The Office Action goes on to state, however, that it “was well known in the art at the time the invention was made that in electronic circuits when an amplifier is used to amplify a signal that contains noise that when the signal is amplified the noise is also amplified.” Applicant submits that Shinohara et al. does not teach or suggest, and Applicant has not found anything in the prior art to support the taking of official notice, that a photoelectric conversion apparatus that includes a sensor unit and a memory unit, where the first amplifier included in the sensor unit and the second amplifier included in the memory unit are arranged to have different gains, respectively, so that the sensor unit and the memory unit output respective signals with the same gain, as recited in Claim 1.

Applicant submits that at least for this reason Claim 1 is patentable over Shinohara et al., and respectfully request withdrawal of this rejection.

The other rejected claims in this application depend from Claim 1 discussed above, and, therefore, are submitted to be patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, individual reconsideration of the patentability of each claim on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and the allowance of the present application.

Applicant's undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,


Attorney for Applicant

Registration No. 47,138

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

NY_MAIN 436011v1